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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/573,121	REED ET AL.
	Examiner	Art Unit	
	Jasmine Myers	2447	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 June 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-9 and 11-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9 and 11-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 June 2009</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The applicants amended Claims 1-9 and 11-33; and cancelled Claim 10 in the

amendment filed 4-June-2009.

Claims 1-9 and 11-33 are pending.

Response to Arguments

2.   Applicant's arguments with respect to claim 1 have been considered but are moot

in view of the new ground(s) of rejection.

Specification

3.   The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

of the following is required: the "computer readable storage medium" of Claims 31-33.

Claim Objections

4.   Claim 4 is objected to because of the following informalities: line 2, "correspond"

should be "corresponds".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5.   The "computer readable storage medium" of Claims 31-33 is interpreted to

exclude media such as paper and transmission-type media.

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to Claims 1-21, the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1-3, 5-9, 11-13, 16, 18-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6546002 B1) in view of Araujo et al. (US 20030191799 A1) and further in view of Pitkin et al. (US 5341477 A).

With respect to Claim 1, Kim teaches a computing apparatus having a software agent for representing a person in the virtual environment ("mobile interface agent (MIA)", col. 5, lines 56-57; "MIA that is running as software on a computer or PDA

device", col. 6, lines 2-3; "Information specific to a particular user is stored in the form of

the profile data", col. 7, lines 50-51, where storing information specific to a user is

interpreted as representing said user; and "Attributes include specific characteristics . . .

that can be used to represent the user through the user interface", col. 8, lines 54-55,

where representing the user through the user interface is interpreted as representing

said user in a virtual environment). Kim teaches the software agent comprising: one or

more application specific modules, executing on the computing apparatus, each of

which represents application specific features of the agent, ("MIA includes . . . a pointer

resolver, a scheduler, . . . an application server interface (AppServ interface)", col. 9,

line 64 – col. 10, line 1, where a pointer resolver, a scheduler and an application server

interface are interpreted as application specific modules each of which represents

application specific features of the agent; "MIA 102 can also have menu functions or

applications to schedule certain actions to be performed at specified periods", col. 10,

lines 19-21; "MIA 102 can have a backup application", col. 10, line 23). Kim teaches

inter-module communication, executing on the computing apparatus, which supports

communication between the one or more application specific modules ("an input

interface . . . an output interface", col. 6, lines 38-40, and "a network interface", col. 9,

line 66, where input, output and network interfaces are interpreted as common generic

features of an agent; "network interface is used to connect the controller to the network",

col. 10, lines 43-44, and "computer device having the MIA is connected to the network,

the user can access applications/services from the AppServ and profile data from the

master database", col. 7, lines 23-26, where accessing applications/services and profile

data teaches inter-module communication between a combination of the one or more

application specific modules and the core module, and said inter-module

communication is facilitated by the network interface). Kim does not explicitly disclose a

core module, executing on the computing apparatus, which contains one or more

functional groups which define common or generic features of the agent, said features

at least in part facilitating inter-agent communication; and inter-module communication

which supports communication between a combination of the one or more application

specific modules and the core module. However, Araujo teaches a core module,

executing on the computing apparatus, which contains one or more functional groups

which define common or generic features of the agent, said features at least in part

facilitating inter-agent communication ("virtual office software", paragraph 75,

interpreted as a core module, where said virtual office software "contains four office

application modules", paragraph 95, interpreted as one or more functional groups; office

application modules include "File-sharing application module . . . to provide user file

information . . . and permit the user to copy, move and delete files", paragraph 97,

"Thin-client application module . . . interacts . . . with a client application program",

paragraph 99, and "Administration module . . . to permit controlled, secure, remote

access to the virtual office functionality", paragraph 100, said modules/features

interpreted as common or generic features of the agent which facilitate inter-agent

communication) in order to provide remote user access to network-supported and

hosted functions, with the same ease of use as a directly connected computer

(paragraph 57). Araujo teaches inter-module communication, executing on the

computing apparatus, which supports communication between a combination of the one

or more application specific modules and the core module ("incoming packets . . . flows

. . . within the SEP through device drivers module, and via the O/S kernel, to TCP/IP

processing module . . . to web server . . . to virtual office software", paragraph 88, where

said flow of incoming packets teaches inter-module communications means connecting

together application specific modules (including device drivers module, O/S kernel,

TCP/IP processing module and web server) and a core module (virtual office software)

of an agent). Therefore, based on Kim in view of Araujo, it would have been obvious to

one having ordinary skill in the art at the time the invention was made to utilize the

teaching of Araujo to the system of Kim in order to provide remote user access to

network-supported and hosted functions, with the same ease of use as a directly

connected computer. Kim and Araujo do not explicitly disclose each respective

application specific module representing application specific features which are not

known to the other application specific modules; and wherein the respective application

specific module sends a request including a label indicating a respective application

specific, common or generic feature to be performed, and the inter-module

communication determines whether one or more of the other application specific or core

modules are capable of performing the respective application specific, common or

generic feature based on the label such that when at least one of the application

specific or core modules are capable of performing the associated specific, common or

generic feature, a call is sent to the one of the application specific or core modules to

perform the associated application specific, common or generic feature. However,

Pitkin teaches each respective application specific module representing application

specific features which are not known to the other application specific modules

("enables a client to use a service even though the client is unaware of the presence or

absence of any individual servers within the network", col. 2, lines 47-50) in order to

provide efficient use of network resources (col. 2, lines 25-26). Pitkin teaches wherein

the respective application specific module sends a request including a label indicating a

respective application specific, common or generic feature to be performed, and the

inter-module communication determines whether one or more of the other application

specific or core modules are capable of performing the respective application specific,

common or generic feature based on the label such that when at least one of the

application specific or core modules are capable of performing the associated specific,

common or generic feature, a call is sent to the one of the application specific or core

modules to perform the associated application specific, common or generic feature

("responds to requests from accessing clients concerning which member of that server

set is capable of providing the requested service", col. 2, lines 38-41, teaching

determining whether an application specific or core module is capable of performing a

requested service, interpreted as a feature; "broker 30 receives a message from the

client 13 via path 54 containing the name of the service requested", col. 9, lines 66-68,

where a name of a service teaches a label indicating a respective application specific,

common or generic feature). Therefore, based on Kim in view of Araujo and further in

view of Pitkin, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to utilize the teaching of Pitkin to the system of Kim in view

of Araujo in order to provide efficient use of network resources.

With respect to Claim 2, Kim further teaches wherein functionality of the one or

more functional groups comprise one or more of the following, belief management, user

profile management, agent-user communication, module management, basic generic

reasoning tools and/or between agent module to module communication ("MIA includes

. . . a profile filter", col. 9, line 64 – col. 10, line 1, where a profile filter is interpreted as a

functional group within the core module, and the MIA will "access a user's MIA profile

data via the profile data filter", col. 10, lines 48-49, in order to "periodically update . . .

the profile data", col. 7, lines 53-55, where updating profile data is interpreted as

managing a user profile).

With respect to Claim 3, Kim discloses the claimed subject matter as discussed

above except wherein the core module is provided with method means which provide

the one or more functional groups. However, Araujo teaches wherein the core module

is provided with method means which provide the one or more functional groups

("virtual office software", paragraph 75, interpreted as a core module, where said virtual

office software "contains four office application modules", paragraph 95, interpreted as

one or more functional groups; office application modules include "File-sharing

application module . . . to provide user file information . . . and permit the user to copy,

move and delete files", paragraph 97, "Thin-client application module . . . interacts . . .

with a client application program", paragraph 99, and "Administration module . . . to

permit controlled, secure, remote access to the virtual office functionality", paragraph

100, said modules/features interpreted as common or generic features of the agent).

Therefore, the limitations of Claim 3 are rejected in the analysis of Claim 1 above, and

the claim is rejected on that basis.

With respect to Claim 5, Kim further teaches wherein communication means are

provided to facilitate communication between application specific modules in different

agents ("Network can also be used to transfer information, files, data, applications, etc.

between the MIA and other remote MIAs", col. 8, lines 2-4, where an MIA and a remote

MIA are different agents, and the information is transferred between application specific

modules of said different agents).

With respect to Claim 6, Kim further teaches wherein the core module acts as an

interface between external devices and at least one application specific module

("controller receives input commands via the input interface", col. 10, lines 3-4, where

"user can input commands via an action command . . . action command is generally

performed using a conventional keyboard, mouse, or pad", col. 6, lines 42-47, and a

keyboard, mouse and pad are external devices; and "controller then processes the input

commands", col. 10, lines 5-6, where if a "user activates a pointer using one of the input

commands, this command signal will be transmitted to the pointer resolver via . . . the

controller", col. 10, lines 10-13, interpreted as the controller receiving input from an

external device, and acting as an interface to transmit said input to the pointer resolver

(application specific module)).

With respect to Claim 7, Kim discloses the claimed subject matter as discussed

above except wherein a specification of message conversation protocols and a

specification of primitive message semantics are implemented in separate modules. However, Araujo teaches wherein a specification of message conversation protocols and a specification of primitive message semantics are implemented in separate modules ("Protocol engine . . . extracts the interaction data from the AIP message . . . RDP component . . . converts it into a corresponding RDP message", paragraph 135, where a protocol engine is interpreted to contain a specification of message conversation protocols, an RDP component is interpreted to contain a specification of primitive message semantics, and said protocol engine and RDP component are interpreted as being implemented in separate modules). Therefore, the limitations of Claim 7 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 8, Kim discloses the claimed subject matter as discussed above except wherein the core module provides primitive semantics for defining communication. However, Araujo teaches wherein the core module provides primitive semantics for defining communication ("each of the modules . . . generates a message", paragraph 96, where the modules are the functional groups of the core modules, and generating a message teaches utilizing primitive semantics provided by the modules for defining communication). Therefore, the limitations of Claim 8 are rejected in the analysis of Claim 7 above, and the claim is rejected on that basis.

With respect to Claim 9, Kim discloses the claimed subject matter as discussed above except wherein the one or more application specific modules specify message conversation protocols. However, Araujo teaches wherein the one or more application

specific modules specify message conversation protocols ("Sendmail module . . .

implements message transmission through use of SMTP (simplified mail transport

protocol)", paragraph 81, where a sendmail module is interpreted as an application

specific module, and implementing message transmission trough use of SMTP is

interpreted as specifying message conversation protocols). Therefore, the limitations of

Claim 9 are rejected in the analysis of Claim 1 above, and the claim is rejected on that

basis.

With respect to Claim 11, Kim discloses the claimed subject matter as discussed

above except wherein said inter-module communication connects together all

application specific modules and the core module in the agent. However, Araujo

teaches wherein said inter-module communication connects together all application

specific modules and the core module in the agent ("SEP 200 acts both as a bridge

between the user and his(her) office applications", paragraph 66, where SEP is service

enablement platform, consisting of "operating system (O/S) and related modules 305

and virtual office software", paragraph 75, where an operating system and related

modules are interpreted as application specific modules and virtual office software is a

core module, and SEP acting as a bridge between a user and his office applications

teaches inter-module communication means connecting together all application specific

modules and the core module; and "incoming packets . . . flows . . . within the SEP

through device drivers module, and via the O/S kernel, to TCP/IP processing module . .

. to web server . . . to virtual office software", paragraph 88, where said flow of incoming

packets teaches inter-module communications means connecting together all

application specific modules (including device drivers module, O/S kernel, TCP/IP

processing module and web server) and the core module (virtual office software) of the

agent). Therefore, the limitations of Claim 11 are rejected in the analysis of Claim 1

above, and the claim is rejected on that basis.

With respect to Claim 12, Kim discloses the claimed subject matter as discussed

above except wherein the inter-module communication is provided with one or more

function calls. However, Araujo teaches wherein the inter-module communication is

provided with one or more function calls ("TCP/IP packet processing . . . SSL

processing", paragraph 88, where TCP/IP packet processing and SSL processing are

interpreted as functions within application specific modules, and are interpreted as

being run via function calls through the enter-module communication means).

Therefore, the limitations of Claim 12 are rejected in the analysis of Claim 1 above, and

the claim is rejected on that basis.

With respect to Claim 13, Kim discloses the claimed subject matter as discussed

above except wherein the inter-module communication provides for communication

between functions in different modules of the agent. However, Araujo teaches wherein

the inter-module communication provides for communication between functions in

different modules of the agent ("incoming packets . . . flows . . . within the SEP through

device drivers module . . . to TCP/IP processing module for appropriate TCP/IP packet

processing, including packet disassembly . . . to web server, which calls on services of

Open SSL to perform SSL processing on the packet if necessary", paragraph 88, where

TCP/IP packet processing and SSL processing are interpreted as functions in different

modules, and flow of incoming packets through the functions is interpreted as

communication between said functions). Therefore, the limitations of Claim 13 are

rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 16, Kim discloses the claimed subject matter as discussed

above except wherein the agent further comprises an address resolving means for

resolving an address in a message to one of said one or more application specific or

core modules. However, Araujo teaches wherein the agent further comprises an

address resolving means for resolving an address in a message to one of said one or

more application specific or core modules ("IP address translation on each such

message and route that message to a correct office application server", paragraph 72,

where IP address translation on a message is interpreted as resolving an address in a

message, and routing a message to a correct office application server teaches

transmitting said message through one of a plurality of application specific modules).

Therefore, the limitations of Claim 16 are rejected in the analysis of Claim 1 above, and

the claim is rejected on that basis.

With respect to Claim 18, Kim further teaches wherein the computing apparatus

is one or more computers ("MIA that is running as software on a computer", col. 6, lines

2-3).

With respect to Claim 19, Kim further teaches wherein the computing apparatus

is one or more personal digital assistants ("MIA that is running as software on a . . .

PDA device", col. 6, lines 2-3).

With respect to Claim 20, Kim further teaches wherein the computing apparatus is one or more mobile communications devices ("mobile interface agent to be accessible by a user using any digital communication device such as a cellular phone", col. 4, lines 30-32).

With respect to Claim 21, Kim further teaches wherein the computing apparatus is distributed across a plurality of computing devices ("single server does not maintain all of the user profile data, but is rather distributed throughout multiple and redundant servers", col. 11, lines 39-41).

With respect to Claim 22, Kim teaches a method of performing functions in the software agent ("method for remotely accessing and using computer programs from any computer device", col. 4, lines 55-57). Kim does not explicitly disclose receiving a request specifying a function; mapping said request to a module method corresponding to the specified function; and invoking said module method. However, Araujo teaches receiving a request specifying a function ("browser 15 communicates user form input and URI (uniform resource identifier)/URL (uniform resource locator) selection via HTTP requests to SEP", paragraph 64, where SEP, service enablement platform, receives request, and user form input and URI/URL selection are interpreted as specifying a function). Araujo teaches mapping said request to a module method corresponding to the specified function ("HTTP request is extracted and sent to virtual office software 400 for protocol translation into a form suitable for use by a desired office application", paragraph 88, where translating a protocol into a form suitable for use by a desired office application teaches mapping user requests to office applications, and an office

application is interpreted as a specified function). Araujo teaches invoking said module method ("user can . . . remotely execute . . . any of his (her) thin-client applications", paragraph 65, where remotely executing an application is interpreted as invoking a module method). Therefore, the limitations of Claim 22 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 27, Kim teaches a method of inter-agent communication between software agents ("transfer information, files, data, applications, etc. between the MIA 102 and other remote MIAs", col. 8, lines 3-4, teaching inter-agent communication). Kim teaches resolving said address to one of one or more application specific or core modules in a second, receiving agent ("Network can also be used to transfer information . . . between the MIA and other remote MIAs", col. 8, lines 2-4, where an MIA and a remote MIA are first and second agents, and the information is transferred from the first MIA to one of a plurality of modules in the second, remote MIA based on a resolved address). Kim does not explicitly disclose receiving a message comprising an address from a first agent; resolving said address; and transferring the message to the resolved module. However, Araujo teaches receiving a message comprising an address from a first agent; resolving said address; and transferring the message to the resolved module ("SEP can intercept incoming network messages . . . perform . . . IP address translation . . . and route that message to a correct . . . server", paragraph 72, where intercepting incoming networking messages is interpreted as receiving a message from a first agent, performing address translation teaches that said message includes an address and is interpreted as resolving said address, and routing

a message to a correct server is interpreted as transferring said message to the resolved module). Therefore, the limitations of Claim 27 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 28, Kim further teaches wherein said address specifies the resolved module ("address of a server for a particular service", col. 11, lines 16-17, where a service is accessed through a module, and specifying an address for a service is interpreted as specifying an address for its corresponding module).

With respect to Claim 29, Kim further teaches wherein the method further comprises communicating with an external device by: identifying the device that a user is employing; mapping said device to a set of media types; and initiating delivery of media to said device responsive to the mapped set ("MIA will check to determine what computer device it is on and based on the device's profile and list of registered applications, it will enable local applications and services that are available", col. 12, lines 35-38, where a device profile and list of registered applications are interpreted as a mapping of a set of media types for a given device; "MIA will use appropriate types of output for the particular device that it is running on", col. 7, lines 8-9, where using appropriate types of output for a particular device is interpreted as initiating delivery of media to said device based on the device's profile and list of registered applications).

With respect to Claim 30, Kim further teaches wherein the method further includes limiting the set of media types based on user preferences ("profile data includes . . . applications/services", col. 8, lines 23-27, where applications and services are interpreted as specific to a given device; "MIA can also check for other information

regarding the user's preference from the profile data", col. 9, lines 51-52, interpreted to include user preferences for a limited set of media types available for a given device).

With respect to Claim 31, Kim teaches a computer readable storage medium storing program instructions for causing a computer to operate a software agent ("MIA that is running as software on a computer", col. 6, lines 2-3; and "MIA . . . can be implemented by way of software", col. 6, lines 34-36).

With respect to Claim 32, Kim teaches a computer readable storage medium storing program instructions for causing a computer to perform the method ("MIA that is running as software on a computer", col. 6, lines 2-3; and "MIA . . . can be implemented by way of software", col. 6, lines 34-36).

With respect to Claim 33, Kim teaches a computer readable storage medium storing program instructions for causing a computer to perform the method ("MIA that is running as software on a computer", col. 6, lines 2-3; and "MIA . . . can be implemented by way of software", col. 6, lines 34-36).

10.   Claims 4, 14-15, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Araujo and Pitkin and further in view of Berger et al. (US 20030014466 A1).

With respect to Claim 4, Kim, Araujo and Pitkin disclose the claimed subject matter as discussed above except wherein functionality of the one or more functional groups corresponds to a set of labels. However, Berger teaches wherein functionality of the one or more functional groups correspond to a set of labels ("processes are

provided with a label or tag", paragraph 35, where a process is interpreted as a

functional group, and the label provided to the process is interpreted as corresponding

to the functionality of said process) in order to implement custom system calls

(paragraph 52). Therefore, based on Kim in view of Araujo and Pitkin and further in

view of Berger, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to utilize the teaching of Berger to the system of Kim in

view of Araujo and further in view of Pitkin in order to implement custom system calls.

With respect to Claim 14, Kim, Araujo and Pitkin disclose the claimed subject

matter as discussed above except wherein the inter-module communication provides for

mapping a request from a first module to a method means in a second module.

However, Berger teaches wherein the inter-module communication provides for

mapping a request from a first module to a method means in a second module

("memory comprising compartment name to number mapping . . . to identify the

corresponding rules in rule database that are applicable to a particular compartment",

paragraph 48, where a compartment is interpreted as a module, and "Rule database

contains information about allowable communication paths between compartments",

paragraph 47, where rules that are applicable to a particular compartment provide for

mapping a request from said compartment to a second compartment, according to

information about allowable communication paths contained in the rule database) in

order to implement custom system calls (paragraph 52). Therefore, based on Kim in

view of Araujo and Pitkin and further in view of Berger, it would have been obvious to

one having ordinary skill in the art at the time the invention was made to utilize the

teaching of Berger to the system of Kim in view of Araujo and further in view of Pitkin in order to implement custom system calls.

With respect to Claim 15, Kim, Araujo and Pitkin disclose the claimed subject matter as discussed above except wherein said request from said first module comprises a label specifying a function and said method means in a second module corresponds to the specified function. However, Berger teaches wherein said request from said first module comprises a label specifying a function and said method means in a second module corresponds to the specified function ("processes are provided with a label or tag", paragraph 35, where a process is interpreted as a function in a module; "system calls may include . . . to run processes in particular compartments", paragraph 47, where a system call is interpreted as a request from a first module for a function in a second module, and said system call includes a label specifying said function). Therefore, the limitations of Claim 15 are rejected in the analysis of Claim 14 above, and the claim is rejected on that basis.

With respect to Claim 23, Kim, Araujo and Pitkin disclose the claimed subject matter as discussed above except wherein said request comprises a label specifying said function. However, Berger teaches wherein said request comprises a label specifying said function ("processes are provided with a label or tag", paragraph 35, where a process is interpreted as a function; and "system calls may include . . . to run processes in particular compartments", paragraph 47, where a system call is interpreted as a request, comprising a label specifying the requested function) in order to implement custom system calls (paragraph 52). Therefore, based on Kim in view of

Araujo and Pitkin and further in view of Berger, it would have been obvious to one

having ordinary skill in the art at the time the invention was made to utilize the teaching

of Berger to the system of Kim in view of Araujo and further in view of Pitkin in order to

implement custom system calls.

With respect to Claim 24, Kim, Araujo and Pitkin disclose the claimed subject

matter as discussed above except wherein the invoking said module comprises:

receiving a request comprising a label; looking up the label in a table; and calling a

method corresponding to the label. However, Berger teaches wherein the invoking said

module comprises: receiving a request comprising a label ("system calls . . . to run

processes in particular compartments", paragraph 47, where a system call is interpreted

as a request; and "processes are provided with a label or tag", paragraph 35, where the

process is called using the label). Berger teaches looking up the label in a table("Rule

database contains information about allowable communication paths between

compartments", paragraph 47, where a rule database is interpreted as a table

containing labels; and "identify the corresponding rules in rule database that are

applicable", paragraph 48, where identifying applicable rules teaches looking up a label

in the rule database). Berger teaches calling a method corresponding to the label

("processes of the compartments are limited to accessing system resources according

to the rules stored in rule database", paragraph 47, where a process accessing system

resources teaches calling a method corresponding to the label identifying said process).

Therefore, the limitations of Claim 24 are rejected in the analysis of Claim 23 above,

and the claim is rejected on that basis.

With respect to Claim 26, Araujo further teaches wherein the method of invoking

said module further comprises returning a value to an originator of the request

("construct a suitable response containing that data (if any) and provide it . . . to user

interaction component . . . Component then returns . . . to user browser", paragraph

105, where user browser is interpreted as an originator of the request, and a suitable

response is interpreted as a value).

11.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in

view of Araujo and Pitkin and further in view of Shobatake (US 5506847 A).

With respect to Claim 17, Kim, Araujo and Pitkin disclose the claimed subject

matter as discussed above except wherein said agent further comprises a transfer

means for transferring messages from the resolved modules such that the messages

are interleaved to allow an agent to be simultaneously involved in multiple

conversations with other agents. However, Shobatake teaches wherein said agent

further comprises a transfer means for transferring messages from the resolved

modules such that the messages are interleaved to allow an agent to be simultaneously

involved in multiple conversations with other agents ("message interleaving can be

performed", col. 73, line 5) in order to minimize the transfer delay of an average

message (col. 73, lines 5-6). Therefore, based on Kim in view of Araujo and Pitkin and

further in view of Shobatake, it would have been obvious to one having ordinary skill in

the art at the time the invention was made to utilize the teaching of Shobatake to the

system of Kim in view of Araujo and further in view of Pitkin in order to minimize the

transfer delay of an average message.

12.   Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in

view of Araujo, Pitkin and Berger and further in view of Wolton et al. (US 20040030741

A1).

        With respect to Claim 25, Kim, Araujo, Pitkin and Berger disclose the claimed

subject matter as discussed above except wherein the invoking said module further

comprises selecting a highest priority method corresponding to the label. However,

Wolton teaches wherein the invoking said module further comprises selecting a highest

priority method corresponding to the label ("agents have local or remote registries of . . .

other individual agents . . . they can and will engage with . . . registry is a collection of

agent configuration attributes and contents, which are given a label", paragraph 1018;

"registry of private agent and inter -agent activities are called agent plans . . . plan

registry can have ranking and priority . . . agent can select the higher ranking behavioral

option in the registry that fits the request", paragraph 1019, where the selected higher

ranking behavioral option is interpreted as corresponding to a label identified in a

request) in order to provide an integrated solution which can be effectively used by the

majority of non-programmer consumers (paragraph 47). Therefore, based on Kim in

view of Araujo, Pitkin and Berger and further in view of Wolton, it would have been

obvious to one having ordinary skill in the art at the time the invention was made to

utilize the teaching of Wolton to the system of Kim in view of Araujo and further in view

of Pitkin and Berger in order to provide an integrated solution which can be effectively

used by the majority of non-programmer consumers.

Conclusion

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

14.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jasmine Myers whose telephone number is (571)270-

7201. The examiner can normally be reached on Monday - Thursday 6:00am - 3:30pm,

Friday 6:00am - 10:00m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joon Hwang can be reached on (571) 272-4036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M./
Examiner, Art Unit 2447
4-September-2009

/Joon H. Hwang/
Supervisory Patent Examiner, Art Unit 2447